use of ivabradine leads to a total cost saving of €4826 per patient over 5 years. The use of ivabradine also leads to a higher effectiveness, as it reduces the average number of revascularisation procedures from 1.100 to 0.143, including the initial revascularisation procedures for the standard care arm of the model. The number of revascularisations during the 5-year period is about similar, when excluding the initial revascularisation procedure (0.100 to 0.143). Sensitivity analyses show that ivabradine remains cost saving over the complete range of the input variables. **CONCLUSIONS:** Ivabradine is a cost-effective treatment and, in fact, a dominant treatment: Ivabradine yields to a higher effectiveness as standard treatment with respect to number of revascularisations, but leads to substantial overall cost savings.

PODIUM SESSION II: ECONOMIC EVALUATIONS II

EE5

COST-EFFECTIVENESS OF ATORVASTATIN IN TYPE 2 DIABETES PATIENTS: A PHARMACO-ECONOMIC ANALYSIS OF THE COLLABORATIVE ATORVASTATIN DIABETES STUDY (CARDS) IN THE BELGIAN POPULATION

Marbaix S[1], Vandenberghe H[1], Van Gaal L[2]
[1]Pfizer WPO Belgium, Brussels, Belgium, [2]Antwerp University Hospital, Edegem, Belgium

OBJECTIVES: To estimate the cost-effectiveness of atorvastatin 10 mg compared with no treatment for the primary prevention of cardiovascular (CV) events in Type 2 diabetes patients with no CV history. **METHODS:** A Markov model with 1-year cycles was developed to simulate the CV event and death risk according to the therapeutic approach initiated. The transition probabilities for CV event in the 'no statin treatment' group were derived from the risk-equations reported from the large UK Prospective Diabetes Study (UKPDS). The hazard ratio (HR) from the CARDS clinical trial (0.63; 95% confidence interval [CI], 0.48, 0.83; P = 0.001) was used to adjust these CV event probabilities in the atorvastatin 10 mg treatment group. Characteristics of Type 2 diabetes patients with no CV history were derived from the Belgian Optimize Cardiovascular Prevention in Diabetes (OCAPI) survey. The public health care payers' perspective was taken into account for costing. The direct medical costs of CV events were based on the Public Health Authorities' hospital database for acute care costs and on literature for follow up costs. Drug cost did consider the impact of generic entry on the reimbursement system. Costs were valued at year 2008; costs and outcomes were respectively discounted at 3 and 1.5%. **RESULTS:** Based on a 5-year time horizon, atorvastatin was demonstrated to be cost-effective with an incremental cost/QALY of €23,426. Over a lifetime horizon (25 years), atorvastatin was a cost-neutral therapeutic approach (€9/QALY). At a threshold of €30,000/QALY, atorvastatin had a 99.3% probability to be cost-effective. Furthermore, for higher risk diabetic patients managed in specialist hospital diabetes centres, atorvastatin was cost-saving. **CONCLUSIONS:** Compared to no treatment, the use of atorvastatin 10 mg as a primary prevention strategy in Type 2 diabetes patients not only appears to be cost-neutral over a lifetime, but improves CV outcomes.

EE6

COST-EFFECTIVENESS OF THE ADDITION OF RITUXIMAB TO FIRST-LINE CHEMOTHERAPY TREATMENT REGIMENS IN PATIENTS WITH ADVANCED FOLLICULAR LYMPHOMA IN THE UK

Ray JA[1], Carr E[1], Geary U[2]
[1]F. Hoffmann—La Roche, Basel, Switzerland, [2]Roche Products Limited, Hertfordshire, UK

OBJECTIVES: Following broadening of the EMEA license for advanced follicular lymphoma (FL) which now allows first line treatment with rituximab added to chemotherapy without restriction to the regimen, we evaluated the cost-effectiveness of rituximab added to commonly used chemotherapy regimens from the perspective of the UK national health care system. **METHODS:** A Markov model was developed using published results from 4 phase III randomized-controlled clinical trials evaluating progression-free survival (PFS) and overall survival (OS) in patients with advanced FL. These trials compared the addition of rituximab to chemotherapy regimens of either MCP, CVP, CHOP or CHVP versus chemotherapy alone. Rates of disease progression were derived from the PFS Kaplan-Meier curves using parametric curve fitting, mortality rates were obtained from the Scotland-Newcastle Lymphoma Group database and UK age-specific mortality tables. FL patient utilities elicited using the EQ-5D were applied to PFS and progressed health states. The duration of the treatment effect of rituximab was applied for the period of follow-up specified in each of the clinical trial publications. Medication, supportive care costs and quality-adjusted life years (QALYs) were estimated over a lifetime time horizon (25 years) and discounted at 3.5% *per annum*. Univariate and probabilistic sensitivity analysis was performed to evaluate uncertainty. **RESULTS:** The addition of rituximab to chemotherapy increased QALYs by 1.223, 1.034, 0.858 and 0.471 years for MCP, CVP, CHOP and CHVP, respectively, compared to chemotherapy alone. The incremental cost per QALY gained was £5620, £6455, £7970 and £8422, for MCP, CHOP, CVP and CHVP, respectively, all below commonly used thresholds in the UK. Sensitivity analyses indicated these results were robust, and most sensitive to the duration of treatment effect. **CONCLUSIONS:** For all chemotherapy regimens evaluated, the model demonstrated the addition of rituximab increased quality-adjusted life expectancy and is a highly cost-effective treatment option for patients with advanced FL.

EE7

ECONOMIC ANALYSIS OF PROPHYLACTIC CERVICAL CANCER VACCINATION IN ITALY: THE NATIONAL AND REGIONAL LEVEL

Cavallo M[1], Cipriani F[2], Demarteau N[3], Gerzeli S[1], Marocco A[2], Bamfi F[2]
[1]Bocconi University, Milano, Italy, [2]GlaxoSmithKline Spa, Verona, Italy, [3]GlaxoSmithKline Biologicals, Wavre, Belgium

OBJECTIVES: The impact of cervical cancer prevention, through 12-year-old female vaccination with *Cervarix*™ (GlaxoSmithKline), has been published for many countries at the national level. However, to our knowledge no attempt has been made to address the impact at a regional level. Since the Italian health reforms of the early 1990s, introducing "managerialism", decentralization and quasi-market mechanisms; regional authorities have consequently been experimenting with different organizational and funding models to achieve an acceptable combination of equity, efficiency, freedom of choice and cost-containment. **METHODS:** A Markov model, previously described and successfully adapted to the national scenario (La Torre, 2007), has been used to explore the impact of prophylactic cervical cancer vaccination with *Cervarix*™ at a regional level in Italy. Resource use was based on a standard therapeutic path applied to all regions. However we quantified the impact of the so-called "decentralization progress" by collecting regional data on: Pap-test coverage, tariffs for treatments and cost of the vaccination course. The analyses were combined with regional budget impact analyses, considering the demography and the effective tender price for each region. **RESULTS:** Our analyses demonstrated the heterogeneity present at regional level in Italy (e.g. regular screening, ranges from 36% to 84%; cost of cervical